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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,399	10/03/2003	Hidegori Sato	MAT-8464US	3532
23122	7590	09/21/2005	EXAMINER	
RATNERPRESTIA P O BOX 980 VALLEY FORGE, PA 19482-0980			OLANDER, GABRIEL D	
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DATE MAILED: 09/21/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/678,399	Applicant(s) SATO ET AL.	
	Examiner Gabriel D. Olander	Art Unit 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 11 and 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/03/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/03/2003</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-10, drawn to a deflection yoke apparatus, classified in class 313, subclass 440.
- II. Claims 11-12, drawn to a method for manufacturing a centering magnet, classified in class 445, subclass 3.

The inventions are distinct, each from the other because of the following reasons:

Inventions of Group I and Group II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, instead of cutting an end of the second knob, the knob manufactured with a shorter length before the injection of molding. Invention of Group II is classified in a different class and subclass, therefore provides extra burden upon the Examiner and this restriction is deemed proper. The criteria for establishment of restriction is if it can be shown that the product made can be manufactured by an entirely different process as claimed by the applicant.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper

During a telephone conversation with Lawrence Ashery on 9/13/2004 a provisional election was made without traverse to prosecute the invention of Hidenori Sato, claims 1-20. Affirmation of this election must be made by applicant in replying to this Office action. Claims 11-12 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

Claim 6 is objected to because of the following informalities: the insulating frame referred to in the phrase "said insulating frame" is not previously mentioned. Appropriate correction is required. For examination based on merit, "said insulating frame" is interpreted as "an insulating frame" within claim 6.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 & 5-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Carroll et al (US 4,687,966).

Claim 1: Carroll discloses a deflection yoke used for a cathode ray tube (CRT) including a tube having a screen surface (lines 8-13, column 1) and a straight portion for accommodating an electron gun, said deflection yoke comprising:

a main deflection yoke including

first and second horizontal deflecting coils having substantially saddle shapes (shown fig. 6) and including first and second coil-connection-wire sections (fig. 8, 61) and first and second horizontal deflection sections, respectively, said first and second coil-connection-wire sections being wound in a direction perpendicular to a

Art Unit: 2879

tube axis of said CRT (fig. 8) and along said straight portion, respectively, said first and second horizontal deflection sections being located towards said screen surface from said first and said second coil-connection-wire sections, respectively (lines 8-13, column 1), and

first and second vertical deflecting coils (fig. 8, 41); and a sub-deflection yoke provided at a side of said main deflection yoke towards said electron gun of said CRT (fig. 8, 62).

Claim 2: Carroll discloses the deflection yoke of claim 1, wherein said coil-connection-wire sections are piled up about an axis perpendicular to said tube axis in a direction parallel with said tube axis and along said straight portion (fig. 8, 61).

Claim 5: Carroll discloses the deflection yoke of claim 1, further comprising a ferrite core mounted to said main deflection yoke, said ferrite core having a uniform inner diameter over an entire length of said ferrite core (fig. 2, 35).

Claim 6: Carroll discloses the deflection yoke of claim 1 wherein said horizontal deflection coils have lead wires (fig. 6, 70), and wherein said insulating frame (fig., 48) has a cartridge portion parallel to said tube axis arranged to have said lead wire pass through said cartridge portion, said insulating frame having a recess formed therein for having said lead wire pass through said recess (fig. 6, 39), and

wherein said lead wire is led from said recess into said cartridge portion (fig. 6, 39).

Claims 1, 3, & 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Okuyama et al (US 6,166,484).

Claim 1: Okuyama discloses a deflection yoke used for a cathode ray tube (CRT) including a glass tube having a screen surface (lines 17, column 1) and a straight portion for accommodating an electron gun, said deflection yoke comprising:

a main deflection yoke including

first and second horizontal deflecting coils having substantially saddle shapes (shown fig. 6) and including first and second coil-connection-wire sections (lines 50-52, column 2) and first and second horizontal deflection sections, respectively, said first and second coil-connection-wire sections being wound in a direction perpendicular to a tube axis of said CRT (fig. 7) and along said straight portion, respectively, said first and second horizontal deflection sections being located towards said screen surface from said first and said second coil-connection-wire sections, respectively (fig. 6), and

first and second vertical deflecting coils (lines 52-54, column 1); and a sub-deflection yoke provided at a side of said main deflection yoke towards said electron gun of said CRT (lines 54-56, column 1).

Claim 3: Okuyama discloses the deflection yoke of claim 1,

wherein said first and said second vertical deflecting coils are located outside said first and said second horizontal deflecting coils (fig. 1),

wherein a diameter of curved surfaces of said first and said second horizontal deflection sections facing said first and second vertical deflecting coils on a first plane

where said first and second horizontal deflecting coils face each other is identical to a diameter of said horizontal deflection sections on a second plane perpendicular to said first plane and said tube axis (fig. 7), and

wherein a diameter of said first and second coil-connection-wire sections ranges from 1.05 to 1.35 times said diameter of said first and second horizontal deflection sections (lines 50-54, column 1).

Claim 4: Okuyama discloses the deflection yoke of claim 3, further comprising an insulating frame disposed between said first and second horizontal deflection coil side and first and second vertical deflection coil side (fig. 1, 23),

wherein diameters of curved surfaces of said first and second vertical deflecting coils facing CRT on a third plane where said first and second vertical deflecting coils face each other become smaller toward said electron gun from said screen surface and become larger at sides of said first and second vertical deflecting coils towards said electron gun, and said sides of said first and second vertical deflecting coils are combined with said first and second coil-connection-wire sections (fig. 6).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, & 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll et al (US 4,687,966) in view of Hinotami et al (US 4,754,190).

Carroll discloses a deflection yoke comprising all the limitations of claim 1 as detailed above. Carroll does not disclose a centering magnet in a direction towards said electron gun from said sub-deflecting coil, said centering magnet having a substantially-circular shape and including first and second knob portions at a periphery.

Hinotami teaches a magnet (fig. 1, 64) in a direction towards said electron gun from said sub-deflecting coil (fig. 1, 64 & B), said magnet having a substantially-circular shape and including first and second knob portions at a periphery (fig. 1, 64) for centering (line 13, column 5).

The addition of said magnet as taught by Hinotami to the deflection yoke as disclosed by Carroll would be obvious to one of ordinary skill in the art at the time of the invention so as to center electrons.

In regards to claims 9 & 10, Applicant is claiming the product of a centering magnet including a method (i.e. a process) of cutting knob portions, consequently, claims 9 & 10 are considered "product-by-process" claims. In spite of the fact that a product-by-process claim may recite only process limitations, it is the product and not the recited process that is covered by the claim. Further, patentability of a claim to a product does not rest merely on the difference in the method by which the product is made. Rather, is the product itself which must be new and not obvious. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985). Accordingly, the structure implied by the process steps would be considered for

Art Unit: 2879

assessing the patentability of product-by-process claims over the prior art (see MPEP 2113).

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carroll et al (US 4,687,966) in view of Hinotami et al (US 4,754,190) further in view of Haussecker et al (US 6,462,450).

Carroll in view of Hinotami discloses the deflection yoke with centering magnet of claim 7 as detailed above. Carroll in view of Hinotami does not disclose a port provided at the end of a knob.

Haussecker discloses a port at the end of a knob (fig. 2, 5) of an injection molded magnet for use of injecting a magnet resin (lines 53-59, column 2).

The addition of the port as taught by Haussecker to the magnet of claim 7 as disclosed by Carroll in view of Hinotami would be obvious to one of ordinary skill in the art at the time of then invention so as to inject resin.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel D. Olander whose telephone number is 571-272-6011. The examiner can normally be reached on 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2879

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

G.O.

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